

## **REMARKS**

The present Amendment is in response to the Office Action dated August 2, 2005 in reference to the above-identified application. The Examiner set a shortened statutory period for reply of three (3) months, making the present Amendment due by November 2, 2005.

In the Office Action, the Examiner rejects claims 17-19, 21 and 22 under 35 U.S.C. §102(a) as being anticipated by Accutrak photographs submitted as part of Applicant's Supplemental Information Disclosure Statement (IDS) on or about June 22, 2005. Claims 23-25 are rejected under 35 U.S.C. §103(a) as being unpatentable over the Accutrak photographs in view of Richards (US 2004/0050188 A1). By this amendment, Applicant has canceled claims 21, 23 and 24 and has incorporated their recitations into newly amended independent claim 17. Thus, newly amended claim 17 corresponds to dependent claim 24 rewritten in independent form. Various other claims, namely claims 22,25,26 and 29, have their dependencies changed accordingly.

While Applicant appreciates the Examiner's thorough review of the application materials and the indicated allowability of numerous claims, Applicant does respectfully submit that the feature of ultraviolet LEDs, as originally recited in claim 24 and now incorporated into independent claim 17, is not fully and fairly taught by the Richards' reference. There is notable distinction between Applicant's invention (as recited in independent claim 17) and that discuss in the Richards' reference. In Applicant's invention, the UV LEDs, or other suitable UV emitter(s), are employed to force a target (e.g. a dyed gas or its residue) to reveal itself by fluorescing in order to be seen –

otherwise, a technician will not know it is there since it will be invisible. While photo detectors are employed in preferred embodiments, they are not always necessary to detect this generated visible light because it can be seen with the unaided eyes. However, the photo detectors are useful in confined places where one's eyes cannot go, e.g., tubes, etc. Richards' UV sensor, on the other hand, is a passive instrument which does not emit anything to cause a target to alter its physical characteristics in order to be seen. Rather, Richards' camera sensor is a passive sensing device which can see UV light - and it can do so without the need for separate onboard UV emitters.

In the §103 rejection, the Examiner specifically maintains that Richards teaches ultraviolet LEDs [30]. Applicant respectfully disagrees and Applicant's undersigned representative has spoken by telephone with the Examiner on two occasions regarding the Richards' reference. In accordance with 37 C.F.R. §1.33(b), a complete written statement of the substance of these telephone interviews accompanies this response as a separate paper so that it may be made of record in this proceeding.

During the initial telephone call with the Examiner on October 28, 2005 the Examiner offered that Richards inherently teaches ultraviolet LEDs [30] since the publication discusses at ¶30 that the video camera sensing device can have ultraviolet properties. As such, the Examiner offered that Richards suggests the use of ultraviolet emitters in the form of UV LEDs since the reference discusses the capability of ultraviolet detection.

During a second telephone conversation on November 1, 2005 the undersigned reiterated that Richards neither explicitly nor inherently teaches UV LEDs, and that this interpretation is bolstered by the fact that Richards'

device is described in the context of a passive video camera sensor which, while having various detection capabilities, merely incorporates the ability to visibility illuminate an area (much like a flashlight) through the use of LEDs. In response, the Examiner indicated that he will revisit his rejection and asked Applicant to specifically comment on whether or not the teaching of UV detection capabilities in the video camera sensing device 20 of Richards requires the need for UV LED emitters. The Examiner indicated that commentary on this particular point could impact his determination of whether Richards' disclosure is sufficient to support a finding of UV LEDs by implication.

In accordance with the Examiner's request, Applicant's undersigned representative has consulted with the inventor and provides the following representative examples of situations in which the ability of an instrument to sense ultraviolet radiation does not necessitate the need for UV LEDs on the instrument. In general, there are various applications in which one may need to determine whether other devices which themselves emit ultraviolet radiation are working properly -- in particular, situations when a visual inspection would provide no indication one way or the other. One representative example relates to fungicide lamps. As the Examiner may appreciate, fungicide lamps can be used in a variety of environments (e.g., ducting) to kill fungus. For example, a technician may need to ascertain that fungicide lamps distributed within an environment are emitting a desired pattern of UV light sufficient to effectively cover a desired area which would otherwise be invisible to the naked eye. Only an imaging device with UV detection capabilities would be able to confirm the pattern or the status of the

lamps themselves, and its ability to do so would in no way require the provision of UV LEDs. In a similar manner, a sensing device having ultraviolet detection capabilities could be employed to ascertain whether “black lights” are operational. It is also known to use UV detectors during the manufacture of electronic components including semiconductor chips to help confirm, at the wafer level, whether the junctions are working properly. UV detectors are also used to confirm operability of laser diodes during their manufacture.

In fact a UV detector could be employed to confirm the operation of the UV LEDs discussed in the present application. To explain, the Examiner will see that claim 26 of the present application recites the feature of a visible LED on the circuit board for emitting visible light upon emission of ultraviolet light from the UV LEDs, thereby indicating an “ON” state for the ultraviolet LEDs. A visible LED is specifically provided since, otherwise, the naked eye would not be able ascertain if the UV LEDs are operating. Rather than providing a visible LED, the Examiner might appreciate that an appropriate sensing device having ultraviolet detection capabilities, such as presumably contemplated by Richards, could instead be employed to provide the status check.

Applicant believes that the above illustrative examples satisfy the type of information the Examiner is looking for in order to conclude that there is simply an insufficient disclosure in Richards to reasonably conclude that it implicitly teaches UV LEDs. Accordingly, favorable reconsideration of the Examiner’s §103 rejection is respectfully requested in light of the above comments, such that claim 17 (as now amended) and its respective dependents should now be allowable.

No additional claims fees are believed to be payable upon the Amendment. However, the Commissioner is hereby authorized to charge any deficiency in the required fees, or to credit any overpayment, to deposit account number 13-1940.

Based on the foregoing, Applicant submits that the present application is in complete condition for allowance, and action to that end is courteously solicited. If any issues remain to be resolved prior to the granting of this application, the Examiner is requested to contact the undersigned attorney for the Applicant at the telephone number listed below.

Respectfully submitted,

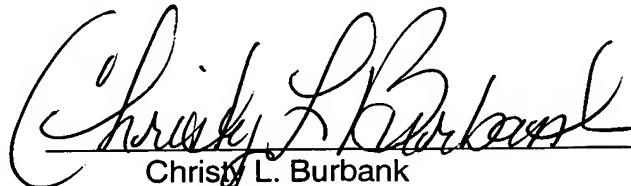
**MARTIN & HENSON, P.C.**

By: 

Timothy J. Martin, #28,640  
Michael R. Henson, #39,222  
9250 West 5<sup>th</sup> Avenue, Suite 200  
Lakewood, Colorado 80226  
(303) 232-3388

**CERTIFICATE OF MAILING UNDER 37 C.F.R. 1.8**

I hereby certify that the foregoing **AMENDMENT (17 pages)**, and is being deposited with the United States Postal Service as first-class mail in an envelope addressed to Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 2nd day of November, 2005.

  
Christy L. Burbank